



1
SEQUENCE LISTING

<110> HOOGENBOOM, HENDRICUS R.J.M.

<120> NOVEL FAB FRAGMENT LIBRARIES AND METHOD FOR THEIR USE

<130> DX/003 CON

<140> 09/988,899

<141> 2001-11-19

<150> PCT/US00/13682

<151> 2000-05-18

<150> 99201558.6

<151> 1999-05-18

<160> 71

<170> PatentIn Ver. 2.1

<210> 1

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative peptide

<400> 1

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn

1

5

10

AB
<210> 2

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 2

cgtatctaaag ttttgtcgtc t

21

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 3

gtccttgacc aggccccc gggc

24

<210> 4
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 4
 cagggaaacag ctatgac

17

<210> 5
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 5
 His His His His His
 1 5

<210> 6
 <211> 349
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05
 <220>
 <223> Description of Artificial Sequence: Synthetic
 polylinker of pCES1

<220>
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<400> 6
 tta ttc gca att cct tta gtt gtt cct ttc tat tct cac agt gca cag 48
 Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ser His Ser Ala Gln
 1 5 10 15

gtc caa ctg cag gtc gac ctc gag atc aaa cgt gga act gtg gga gag 96
 Val Gln Leu Gln Val Asp Leu Glu Ile Lys Arg Gly Thr Val Gly Glu
 20 25 30

tgt taataaggcg cgccaaattct atttcaagga gacagtcata atg aaa tac cta 151
 Cys Met Lys Tyr Leu
 35

ttg cct acg gca gcc gct gga ttg tta ctc gcg gcc cag ccg gcc 199
 Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala Ala Gln Pro Ala
 40 45 50

atg gcc cag gtg cag ctg cag gag agc ggg gtc acc gtc tca agc gcc 247
 Met Ala Gln Val Gln Leu Gln Glu Ser Gly Val Thr Val Ser Ser Ala
 55 60 65

tcc acc aaa tct tgt gcg gcc gca cat cat cat cat cac ggg gcc 295
 Ser Thr Lys Ser Cys Ala Ala Ala His His His His Gly Ala
 70 75 80 85

gca gaa caa aaa ctc atc tca gaa gag gat ctg aat ggg gcc gca tag 343
 Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Gly Ala Ala
 90 95 100

act gtt 349
 Thr Val

A5
 <210> 7
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 7
 Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ser His Ser Ala Gln
 1 5 10 15
 Val Gln Leu Gln Val Asp Leu Glu Ile Lys Arg Gly Thr Val Gly Glu
 20 25 30

Cys

<210> 8
 <211> 67
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 8
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Gly Leu Leu Leu Ala
 1 5 10 15
 Ala Gln Pro Ala Met Ala Gln Val Gln Leu Gln Glu Ser Gly Val Thr
 20 25 30

Val Ser Ser Ala Ser Thr Lys Ser Cys Ala Ala Ala His His His His
 35 40 45

His His Gly Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
 50 55 60

Gly Ala Ala
 65

<210> 9
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 9
 tggaaaggc acgttctttt cttt 24

<210> 10
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 10
 acactctccc ctgttgaagc tctt 24

05

<210> 11
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 11
 tgaacattct gtaggggcca ctg 23

<210> 12
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 12
 agagcattct gcaggggcca ctg 23

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 13
cagrtgcagc tggtgcartc tgg

23

<210> 14
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 14
saggtccagc tggtrcagtc tgg

23

<210> 15
<211> 23
<212> DNA
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<220>
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<400> 15
cagrtcacct tgaaggagtc tgg

23

05
<210> 16
<211> 23
<212> DNA
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<220>
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<400> 16
saggtgcagc tggtgaggagtc tgg

23

<210> 17
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 17
gaggtgcagc tggggagwc ygg

23

<210> 18
<211> 23
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 18
caggtgcagc tacagcagtg ggg

23

<210> 19
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 19
cagstgcagc tgcaggagtc sgg

23

<210> 20
<211> 23
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<220>
<223> Description of Artificial Sequence: Primer

<400> 20
gargtgcagc tgggtgcagtc tgg

23

<210> 21
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 21
caggtacagc tgcagcagtc agg

23

<210> 22
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 22
gacatccagw tgaccaggc tcc

23

<210> 23
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 23
gatgttgtga tgactcagtc tcc

23

<210> 24
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 24
gaaattgtgw tgacrcagtc tcc

23

05
<210> 25
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 25
gatattgtga tgacccacac tcc

23

<210> 26
<211> 23
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<220>
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<400> 26
gaaacgacac tcacgcagtc tcc

23

<210> 27
<211> 23
<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 27

gaaatttgtgc tgactcagtc tcc

23

<210> 28

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 28

cagtctgtgc tgactcagcc acc

23

<210> 29

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 29

cagtctgtgy tgacgcagcc gcc

23

A5

<210> 30

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 30

cagtctgtcg tgacgcagcc gcc

23

<210> 31

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 31

cagtctgccc tgactcagcc t

21

<210> 32
<211> 23
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<220>
<223> Description of Artificial Sequence: Primer

<400> 32
tcctatgwgc tgactcagcc acc

23

<210> 33
<211> 23
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 33
tcttctgagc tgactcagga ccc

23

05
<210> 34
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 34
cacgttatac tgactcaacc gcc

23

<210> 35
<211> 23
<212> DNA
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<400> 35
caggctgtgc tgactcagcc gtc

23

<210> 36
<211> 23
<212> DNA
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<220>
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<400> 36
aattttatgc tgactcagcc cca

23

<210> 37
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 37
cagrcgtgg tgacycagga gcc

23

<210> 38
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 38
cwgccctgtgc tgactcagcc mcc

23

A5
<210> 39
<211> 51
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 39
accgcctcca ccgggcgcgc cttattaaca ctctccctg ttgaagctct

51

<210> 40
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 40
accgcctcca ccgggcgcgc cttattatga acattctgta ggggccactg

50

<210> 41
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 41
 accgcctcca ccgggcgcgc cttattaaga gcattctgca ggggccactg 50

<210> 42
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 42
 gtcctcgcaa ctgcggccca gccggccatg gcccagrtgc agctggtgca rtctgg 56

<210> 43
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 43
 gtcctcgcaa ctgcggccca gccggccatg gccsaggtcc agctggtrca gtctgg 56

05
 <210> 44
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 44
 gtcctcgcaa ctgcggccca gccggccatg gcccagrtca cttgaagga gtctgg 56

<210> 45
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 45
 gtcctcgcaa ctgcggccca gccggccatg gccsaggtgc agctggtgga gtctgg 56

<210> 46
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 46
gtcctcgcaa ctgcggccca gccggccatg gccgaggtgc agctggtgg a gwcyygg 56

<210> 47
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 47
gtcctcgcaa ctgcggccca gccggccatg gcccaggtgc agctacagca gtgggg 56

<210> 48
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 48
gtcctcgcaa ctgcggccca gccggccatg gcccagstgc agctgcagga gtcsgg 56

45

<210> 49
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 49
gtcctcgcaa ctgcggccca gccggccatg gccgargtgc agctggtgca gtctgg 56

<210> 50
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 50
gtcctcgcaa ctgcggccca gccggccatg gcccaggtac agctgcagca gtcagg 56

<210> 51
<211> 24
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 51

tgaggagacg gtgaccaggg tgcc

24

<210> 52

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 52

tgaagagacg gtgaccattg tccc

24

<210> 53

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 53

tgaggagacg gtgaccaggg ttcc

24

<210> 54

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 54

tgaggagacg gtgaccgtgg tccc

24

<210> 55

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 55

accgcctcca ccagtgcact tgacatccag wtgacccagt ctcc

44

<210> 56
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 56
accgcctcca ccagtgcact tcatgttgatgactcagt ctcc

44

<210> 57
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 57
accgcctcca ccagtgcact tgaaattgtg wtgacrcagt ctcc

44

<210> 58
<211> 44
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 58
accgcctcca ccagtgcact tcatattgtg atgacccaca ctcc

44

<210> 59
<211> 44
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 59
accgcctcca ccagtgcact tgaaacgaca ctcacgcagt ctcc

44

<210> 60
<211> 44
<212> DNA
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<220>
<223> Description of Artificial Sequence: Primer

<400> 60
accgcctcca ccagtgcact tgaaattgtg ctgactcagt ctcc

44

<210> 61
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 61
accgcctcca ccagtgcaca gtctgtgctg actcagccac c

41

<210> 62
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 62
accgcctcca ccagtgcaca gtctgtgytg acgcagccgc c

41

Q5
<210> 63
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 63
accgcctcca ccagtgcaca gtctgtcgtg acgcagccgc c

41

<210> 64
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 64
accgcctcca ccagtgcaca rtctgccctg actcagccct

39

<210> 65
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 65
 accgcctcca ccagtgcact ttcctatgwg ctgactcagc cacc 44

<210> 66
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 66
 accgcctcca ccagtgcact ttcttctgag ctgactcagg accc 44

<210> 67
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 67
 accgcctcca ccagtgcaca cgttatactg actcaaccgc c 41

Q5

<210> 68
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 68
 accgcctcca ccagtgcaca ggctgtgctg actcagccgt c 41

<210> 69
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 69
 accgcctcca ccagtgcact taattttatg ctgactcagc ccca 44

<210> 70
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 70

accgcctcca ccagtgcaca grctgtggtg acycaggagc c

41

<210> 71

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 71

accgcctcca ccagtgcacw gcctgtgctg actcagccmc c

41